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(54) **CARDIAC PACING SENSING AND CONTROL**

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See application file for complete search history.

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(57) **ABSTRACT**

A cardiac pacing system having a pulse generator for generating therapeutic electric pulses, a lead electrically coupled with the pulse generator having an electrode, a first sensor configured to monitor a physiological characteristic of a patient, a second sensor configured to monitor a second physiological characteristic of a patient and a controller. The controller can determine a pacing vector based on variables including a signal received from the second sensor, and cause the pulse generator to deliver the therapeutic electrical pulses according to the determined pacing vector. The controller can also modify pacing characteristics based on variables including a signal received from the second sensor.

31 Claims, 29 Drawing Sheets

